

PERFORMANCE WORK STATEMENT

A. PROJECT/TITLE

CFM-56 Engine Line Maintenance Training for Flight Standards Airworthiness Inspectors employed by the Federal Aviation Administration (FAA).

B. BACKGROUND

Under Title 49 of the United States Code (49 U.S.C.), the FAA is authorized to acquire and expend funds for the acquisition, operation, and maintenance of aircraft as necessary in the exercise and performance of the powers and duties of the Administrator. The interests of the public, the safety of the workforce, and the credibility of the organization are best served by having qualified, proficient, and current inspectors conducting maintenance surveillance, testing, and checking functions.

C. SCOPE

The contractor is to provide line maintenance training to FAA inspectors on the CFM-56 aircraft engine. Student quotas for these courses will be assigned by the Flight Standards Service Training Division, AFS-500 or Aircraft Certification Service – Planning and Program Division AIR-500. FAA formal training consists of training courses with agency level course numbers that will be officially recorded in the employee's personnel records.

D. DEFINITIONS

The following definitions are used to define the terminology contained herein and are applicable as required by Title 14 of the Code of Federal Aviation Regulations (14 CFR):

Contracting Officer (CO): The person authorized to act on behalf of the Government to negotiate and award contracts and modifications thereto, and to administer contracts through completion or termination. Except for certain limited authority delegated by the Contracting Officer to a technical representative, the Contracting Officer is the only individual with the authority to direct the work of the Contractor.

Contracting Officer's Technical Representative (COTR): The authorized Government representative(s) acting within the limits of their delegated authority for management of specific projects or functional activities.

FAA: Federal Aviation Administration, a component agency of the U.S. Department of Transportation

E. APPLICABLE DOCUMENTS

Title 14 of the Code of Federal Aviation Regulations (14 CFR), Parts 91, 121, and 135. The applicable regulations are available for download, in pdf format, from www.faa.gov/regulations_policies/faa_regulations/

Title 49 of the United States Code available at <http://uscode.house.gov/download/download.shtml>

F. GENERAL REQUIREMENTS

1. Daily Sessions

When possible, training shall be conducted on a one-shift basis, eight hours per day, five days per week. To the maximum extent possible, training should not start on a Monday, a day following a federal holiday, nor be conducted on a weekend. After the first week, training shall be conducted Monday through Friday. Training is to be continuous during these days except for federally established holidays. Local or state holidays shall not interrupt the training period. Normal hours of training should not begin later than 9:00 a.m. Should a requirement exist to change either the hours or days of training indicated, the change must be coordinated in advance with the FAA COTR.

2. Student Completion Reports

Upon completion of all training, the contractor shall issue a Certificate of Training (Appendix A). The FAA inspector shall sign the certificate, certifying the type of training provided, specific dates, and the duration of such training. One copy of each such certificate shall be submitted to the COTR.

3. Level of Training

FAA personnel are expected to perform at a level compatible with the highest standards of the specialty. Accordingly, each course of instruction shall adhere to the adult learning principles, which include but are not limited to:

- a. Focus the training on "Real World" situations and applications.
- b. Emphasize how the training can be applied.
- c. Relate the training to the instructional objectives.
- d. If possible, relate the training materials to the FAA employees past experience.
- e. Allow reasonable debate and challenge of ideas.
- f. Encourage FAA employees to be resources to one another.

4. Training Facilities

a. Classrooms must be large enough to accommodate at least the entire class plus one observer, with either desks or tables large enough to allow the students to be able to take notes and still have space for them to keep their reference books open during lecture periods. Student chairs must be ergonomically appropriate for 8-hour occupancy.

- b. Sufficient presentation boards for effective teaching shall be provided.

- c. The classroom shall be well lighted. There shall be not less than 30 foot-candles of illumination at the student's desk or table.
- d. The classroom shall be cleaned not less than two times each week of instruction.
- e. Sanitary restroom facilities shall be available within convenient distance of the classroom.
- f. The classroom facilities shall be adequately ventilated; heated in winter and cooled in summer. Temperature range shall not exceed 68 to 74 degrees, Fahrenheit.
- g. Ambient noise shall be below the distraction point. At any position in the classroom, normal instructor voice levels should exceed the ambient noise level by 20 decibels.
- h. Contractor shall comply with safety standards specified by the National Electrical Code, the National Fire Code, and the United States of America Standards Institute in conducting contract training. Each class shall receive a briefing on safety and security procedures to ensure proper egress in the event of any foreseeable emergency.
- i. Local environmental distraction adversely affecting student learning shall be eliminated.
- j. Adequate free student parking shall be available near the training site.
- k. Visual aids used in the classroom to describe specific aircraft system or aircraft components shall be legible, visible from each student station, and color enhanced as necessary to show each system operating mode.

5. Training Outcomes

a. This course must provide inspectors who have minimal or no experience working on the CFM-56 aircraft engine with a detailed description of the operation, component location, engine maintenance, and troubleshooting. At a minimum, the training must include:

- Introduction to the CFM56
- Engine General Description
- Hazards/Safety
- -300/-500/-700 Starting and Ignition
- Engine Indications
- Aerodynamic Stations
- Fuel and Control Systems
- Compressor Anti-Stall (Air) Systems
- Lubrication System
- Anti-Ice System
- CFM56-7 Differences
- CFM56-7B FADEC Flight Line Troubleshooting
- Engine Troubleshooting Review

b. On completion of the course each student will be able to:

- Describe, identify and locate line replaceable units (LRUs)
- Describe systems and LRU basic operation
- Service the engine and undertake nonroutine maintenance
- Remove and install LRUs (including rigging)
- Identify all warnings and cautions associated with working on the engine on-wing
- Inspect, check, troubleshoot and conduct system tests
- Interrogate the on-board maintenance system

6. Training Requirements

a. All instruction shall be presented by a qualified instructor in a classroom environment. If Computer-Based Instruction (CBI) is used to accomplish ground school training then the following requirements shall be met:

(1) Inspectors/pilots shall receive a thorough briefing on the operation and use of the CBI equipment.

(2) At least one instructor shall be present or readily accessible by electronic means to resolve any problems or questions that the inspector/pilot may have regarding the material presented in the CBI program.

(3) All material presented by CBI shall be reviewed and reinforced by a qualified instructor in classroom discussion or one-on-one with the inspector/pilot.

b. In the event the FAA inspector fails to report for training as scheduled, or should become ill, injured or incapacitated during the training period the contractor shall promptly notify the COTR and the inspector/pilot's emergency contact if known.

c. In the event an inspector does not complete the full course provided for in the schedule, the contractor shall invoice the FAA for only that pro rata portion of training actually completed as certified on the Certificate of Training (Appendix A).

d. The contractor shall notify the COTR of the inspector's/pilot's completion status within 5 working days after completion of the training program.

e. Upon completion of all training, the contractor shall issue a Certificate of Training (Appendix A). The FAA inspector shall sign the certificate certifying the type of training provided, specific dates, and the duration of such training. One copy of each such certificate shall be submitted to the COTR.

G. PERFORMANCE REQUIREMENTS FOR TRAINING COURSES

As part of the proposal, the contractor must submit:

- A training syllabus for training in sufficient detail to determine compliance with the requirements specified in section F.5 (Training Outcomes) of this performance work statement (PWS).

- A description of the training aids and facilities in sufficient detail to determine compliance with the requirements of section F (4) of this PWS.
- Proposed training hours in compliance with Schedule B and section F (1) of this PWS.
- Proposed number of training days expected to be required to complete all training and testing for each course.

2. Deliverables

The contractor shall:

- At least two weeks prior to any course, provide each registered student with the training site address, map and/or directions to the training site, a local point of contact and telephone number, and commercially available lodging near the training site.
- Provide training as specified in their submitted training program.
- Provide the hours of training proposed in Schedule B.
- Commence training upon the inspector's arrival at the contractor's facility on the date and time agreed upon.
- Provide a copy of the syllabus, training schedule and course description, course reference book and any other needed course materials to each inspector on the first training day of each training course.
- Complete the training within the proposed number of training days barring unforeseen circumstances beyond the control of the contractor.
- Provide the COTR with a completed certificate of training signed by both the inspector/pilot and the contractor's instructor and the course critique (Appendix A) within 5 calendar days of the completion of the training.